## ABSTRACT OF THE DISCLOSURE

All multiple myeloma cell lines examined showed 5 constitutively active IkB kinase (IKK), IkBa phosphorylation and constitutively active NF-kB. Curcumin, a chemopreventive agent, suppressed constitutive IκBα phosphorylation through inhibition of IKK activity and downregulated NF-κB. Curcumin also downregulated expression of NF-κB-regulated gene products such as IκB $\alpha$ , Bcl-2, Bcl- $x_L$ , cyclin D1 and interleukin-6. 10 Consequently, curcumin suppressed multiple myeloma cell proliferation and arrested cells at the G1/S phase of the cell cycle. Curcumin also induced apoptosis and chemosensitivity to vincristine. Overall, results presented herein provide a molecular basis for the treatment 15 of multiple myeloma patients with this pharmacologically safe agent.